



ADULT EDUCATION AND HIGHER EDUCATION - A FOCUS ON TRANSFORMATIVE LEARNING IN UNIVERSITIES

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ABSTRACT

This paper refers to the role of critical thinking in higher education. Scholars claim that enhancing reflective processes should be the benchmark of student education, combining professional preparation with the development of the ability to think critically. According to this thought we argue that adult education and higher education have many common points of interest. Therefore, it would be very useful if specific adult education techniques could be applied in universities. An implementation performed in University of Patras of a contemporary method from adult education field supports this idea. We argue that the application of methods such as "Transformative Learning through Aesthetic Experience" is effective within the students education framework and cultivate critical thinking.

KEYWORDS: adult education, higher education, transformative learning, critical reflection, teaching methods.

Introduction

Discussion on the need of revising the traditional ways of teaching and learning is especially intense in recent years. One of the fields where the need is particularly highlighted is that of the university (Jarvis 2001; Osborne and Thomas 2003; Halx 2010). The determining role of the university in education and the formation of tomorrow's citizens brings this issue to the scene with repetitive analysis, which highlight the difficulties arising from its previous course and consequently concerns about the future (Renaut 2002).

Adult education literature has highlighted the fact that it is important, when educating university students, to emphasize on the process of learning as well as the content of the subject. (Halx 2010). As it is stated '*The main objective is to evaluate 'knowledge' before "consuming" it*' (Tsui 2003, 328). Meaning it is useful for students to learn to think critically and to evaluate the knowledge offered to them, prior to taking on operational and leadership roles in society. This view is now more relevant than ever, as the intake and elaboration of new knowledge is in many cases, more important than the knowledge acquired (Illeris 2009, 35). For this reason, some scholars believe that the process of critical thinking may offer higher education the best possibilities for the most effective and lasting changes to the lives of the university students (Rogers 2001; Paul 1990). As Brookfield has stated, in periods of crisis of any form (personal, social or political-financial) thinking critically is the only hope for survival (1987, 42).

The Field of Higher Education

This effort however meets restraints within the typical education system itself, something especially visible in Greece, where there is a tendency of insisting on traditional ways of education. Students are used to conventional ways of education, starting from school and continuing throughout the university, with some differences but without essential divergences. Therefore, they are not familiarized with forms of education that encourage critical thinking. Furthermore, the universities also resist to accept their students as adults and to adapt their methods and curricula accordingly (Halx 2010).

A relative analysis of the relation developed between the professor and the university students, suggests that the interaction between them is so important, that if it is not well organized, clear and with common goals from both parties, it can be destructive (Cox 2009). Students usually enter the university feeling inadequate regarding their academic background, with limited knowledge about what is "useful" knowledge and "real" instructions they will seek during their studies. Conversely, professors have a well-established view of learning and the definition of significant knowledge. These two opposite approaches combined, lead to disappointment and frustration on both sides.

Until now, the structure of the current educational system in Greece was based on the notion of separating the human life into two independent periods connected linearly: one of learning and one of working (Stamelos and Vassilopoulos 2004, 176). Nevertheless, in the past years a need is noted of approaching these two pillars as inter-engaging and perpetual. According to the existing literature, within the framework of globalization, today's general objectives of higher education are the following three: professional preparation, preparation of responsible citizens and lifelong learning (Kreber 2009). An effort is being made within the universities to achieve these goals through the implementation of various programs and the disposition of learning tools, which offer specific ways of thinking, of procedures and practice, tailored to every society (Raikou and Karalis 2007, 2010).

However, because of the increasing uncertainty which is evident in the world today, these tools may not be sufficient for the preparation of tomorrow's citizens. For this reason, scholars claim that it would be useful if the university offered programs providing high-quality opportunities to the students to expose themselves to conflicting frames of reference and sometimes even combining professional preparation with the development of the ability to think critically (Karalis, Sotiropoulos, and Kampeza 2007; Karalis 2010). When discourse is encouraged on a specific issue, not only in a scientific field but mainly from an interdisciplinary point of view, students '*are forced to come out of the comfort zone of science and engage in a serious critical elaboration and negotiation of frames of reference and dominating perceptions*' (Kreber 2009, 3-17).

Consequently, the basic aim of higher education should be according to Fink (2003: 2), the development of the ability of complex thinking and justification among the students. A research on reflective and meta-cognitive processes of students showed that they lack these competences to a large extent. The main reason for this lack in the areas mentioned according to literature is the fact that a certain way of teaching continues to be used which is not effective at this level. Consequently, it is essential to develop a learning intervention which will provide students with significant learning experiences. A *significant learning experience* is an educational process that engages students in learning and creates a high energy level in the classroom, while where the outcomes are concerned, it must bring substantial and long term changes, which are useful for their future lives at a personal, social and professional level (Fink 2003, 7).

Specifically, the main objective of *significant learning* is at a first level, to meet the basic and fundamental essential knowledge needed by students; and at a second level to ensure the implementation of this knowledge by the students. This implementation involves acquiring the appropriate competences, managing complex situations as well as developing thinking skills (Fink 2003, 36-55). The notion of thinking refers to three different types named 'triarchy' by Sternberg: critical thinking, creative thinking and practical thinking, all necessary and inter-related in higher education.

Furthermore, another form of significant learning is fulfillment, thus the connection and correlation of several meanings, as well as the humanitarian dimension, learning for ourselves as well as for others. Other forms of significant learning is the development of curiosity and interest, meaning the activation of the emotional capital of the students, while the importance of learning to learn is highlighted, meaning the way students seek knowledge and become a self-defining learner.

When Higher Education Meets Adult Education

While examining all the aforementioned types of intended learning in higher education, it becomes obvious that they converge with the objectives of adult education as we know it. Besides the common points in target-setting that are obvious between adult education and higher education, there is also a consensus regarding the educational techniques that are used. In the last years, a large number of writers, referring to the need of such a change in higher education, provide many research examples of this change in the learning process (Barr and Tagg 1995; Marton Hounsell and Entwistle 1984; Svinicki 1999; Halpern 1994; McKeachie 1999; Davis 1993; Fink 2003). Many different learning methods are proposed in literature which are participatory and experiential for students. Some of the techniques described refer to role play, discourse, simulation, case studies, biogra-

phy, learning in small groups, learning through evaluation and many more, all very well-known and used in the field of adult education.

However, scholars of higher education stress that in order to achieve transformation and development during the learning process, it is essential to develop a fertile environment, a finding which is also highlighted by the theorists of adult education (Langan, Sheese, and Davidson 2009, 49). An educational framework is considered fruitful when there is cooperation, when learning is a social process and learners relate to one another and do not function as isolated individuals. As a relevant study reveals (Donaldson 2009, 75-76), *'transformation cannot occur in learning without cohesion, team work and participation with other co-learners and co-seekers'*. The essence of this transformation is that the student takes on an active role: learners make learning. This is really the result of politics or methodological rules as much as it is of the nature of the relationships and the attitudes of the participants (Mandell and Herman 2009, 86-87). Shor states that *'the initial aim of the distributed power is the reconstruction of education on something occurring from and with the students, instead of from the teachers and on those'* (Langan, Sheese, and Davidson 2009, 55). This learning cooperation expands gradually and usually it is not obvious. Daloz (1999, 59 as quoted in Langan et al. 2009) mentions that *'transformations rarely, if ever, come about abruptly. Rather, they slip into place piece by piece until they become suddenly visible, often to others first and only later to ourselves'*.

Another principle, necessary for a fertile learning environment is for the learning process to occur in depth, emphasizing on the increased understanding of the learning context, through the connections of the elements (Langan, Sheese, and Davidson 2009, 49). Meanwhile, it is essential that the learners are willing to attend and listen to others, in order to reinforce relations that recognize and encourage the acceptance of differences among the participants, as well as their similarities. Nevertheless, all this presupposes the commitment of the participants and their engagement in discussions and the formation of an opinion through feedback and dialogue. Therefore, emphasis is given to the relations that develop among the participants, an element that is an important point for the learning process in adult education (Heron, 2009). Cranton takes it to a deeper level, highlighting that in order to achieve transformative learning it is necessary to reinforce the learner-teacher relationship (2006, 122-125). Cooperation, participation in groups, learning contracts and giving the learner the leading role, are all determining factors for the outcome of the learning process both in the field of higher and of adult education.

Finally, there is also a convergence of views of both scientific fields regarding the extent of pursuing critical thinking and making use of the experiences of the learner. Reflection and encouragement of the students are necessary for them to connect the learning framework to their prior knowledge and their experiences. As Cranton highlights, the life experiences of the individual, even if not directly connected to the object, they are very important during education and reflect on the way they learn (2000, 28-34).

A research showed that the more experienced the learners are, the most likely they are to adopt new views they are exposed to during their education. Besides our prior experiences, what we experience in the classroom is equally important, as it facilitates critical thinking and dialogue, while it is a starting point for transformative learning. What is most important during the learning process is the creation of educational experiences for the students. The educational experiences, according to Dewey, contribute to the development of learner. However, if the learning experience is transformative or not, it depends entirely on the learner (Dirkx and Smith 2009, 64-65). Therefore it is important not only to reinforce the critical thinking of the students but also to provide them with experiences in order to live according to the new way of thinking. Thus the new knowledge will become 'their own'. (Tisdell and Tolliver 2009).

Transformative Learning in Higher Education

Transformative learning is in contrast to the assimilative learning process, thus the type of learning that occurs when students simply obtain new information which can easily fit in existing structures of their knowledge (Mc Gonigal 2005). Transformative learning theory describes the necessary conditions and procedures in order for students to achieve the most important kind of transformative knowledge: the transformation of perception. The transformation of perception is the result of several conditions and processes:

- 1) An incentive fact that revealing the limitations of the current knowledge/ approach of the student.
- 2) Opportunities for the student to define and articulate assumptions on which the current knowledge/ approach of the student is based.
- 3) Critical self- reflection, as the student examines where these assumptions derive from and how these have affected or have limited his or her perception.
- 4) Critical dialogue with other students and the professor, as the group examines alternative ideas and approaches.
- 5) Opportunities to review and apply new perspectives

When the above processes take place, it is possible that the students will re-evaluate their views, apply a new program and stick to it (Cranton 2000). However, the change of a person's views is not simply a rational process. Examining, evaluating and reconstructing existing opinions could be an emotionally overwhelming experience. Students have successfully used their current examples in order to fulfill their studies and understand the world. They may be rightfully reluctant to give up on what they believe to be the correct way of thinking, of creating and of problem solving. Resisting to the transformation of views is common, even among students who seek new learning (Illeris 2009). For this reason, it is important that the teachers who want to facilitate transformative learning, create an environment that encourages and rewards mental extensiveness (Taylor 1998).

The university as a supportive environment is in position to act as a defining element for the transformative process (Raikou 2012, 2014a, 2014b; Raikou and Karalis 2011). It is very important to leave space for transformative learning, as transformative learning occurs through the human relationships that develop. In this framework, decisions and control are gradually transferred to the students, while the trainer doesn't guide them through a specific transformative path, but designs procedures where the students have the opportunity to share control. Therefore, the curriculum is open to discussion (Fisher-Yoshida Geller and Schapiro 2009, 11-14).

In order to facilitate transformative learning and changes in teaching methods for higher education, Gravett & Petersen suggest some points that would be useful to meet (2009). To begin with, they claim that it is necessary for trainers to maintain a well-balanced relationship with their students, which should be based on challenge as well as comfort. It is also important for the students to be able to embrace the new methodology proposed in an interactive teaching, by applying it critically and not by imitating. For this to occur, the educator should give space to the students for multi-dimensional thinking, meaning to be able to contemplate on the theory of the subject, on the interactive teaching method that is applied to them and on their experiences as learners.

As transformative learning experiences can, in many cases, be unstable and threatening to the learners (Mezirow 2000), it is essential to create a sense of security, which is ensured by the specific structure and method of the lesson. Conversely, it is important to provide the opportunity for free exploration and expression of ideas and opinions. Learners should have the possibility to freely explore and express ideas and opinions. Therefore, a balance between structured and flexible teaching is essential. Furthermore, it is useful to choose learning goals that offer better results for designing and applying transformative learning experiences. However, there can be open questions for learners to express themselves freely in a structured dialogue that is meant to conceive the main concept of the subject.

Furthermore, the use of a learning portfolio can help learners reflect on what they have done. It can also help educators monitor changes, weaknesses and the progress in their student's thoughts, all useful elements for the course. However, it is necessary to constantly re-evaluate and review the methods we use, based on the feedback we get from our learners, either from their attitudes towards the lesson or from their portfolio, as well as the experiences and the judgment of the teacher regarding the course of the lesson. Therefore, according to Gravett and Petersen (2009), transformative learning requires two basic elements: dynamics and intention. Dynamics is connected to the fact that teaching changes constantly and re-adjusts in order to meet emerging challenges, while intention refers to the goal, which is connected to the implementation of knowledge accumulated for the improvement of the lesson, and both student's and teacher's learning.

Brookfield (2012) reviewed the opinions of students regarding critical thinking from various learning frameworks. According to his study, the basic elements where most student's views converge regarding the critical reflection process are the following:

- Critical reflection is understood better as a social learning process. Furthermore, the same students in a previous study by Brookfield (2005, 55-56) stated that the most effective element that helps them think critically is participation in small groups.
- It is important for teachers to model the process for the students.
- Critical reflection is better understood when it is based on very specific facts or experiences.
- Some of the most effective triggers for critical reflection are connected to an unexpected event (or a disorienting dilemma).
- Learning to think critically must be gradually sequential. University students like to apply the process initially to relatively impersonal situations or data and then gradually after time to connect the process to their own direct thinking.

Based on the logic and the example by Brookfield who stresses the need for methods that encourage critical reflection in Universities, we chose to apply such

methods in our research attempt.

However, it must be stressed that Greek universities, in contrast to some universities of other countries and especially of the United States, such as Stanford University, are governed by a traditional teacher-centered system, where critical thinking is not one of the main objectives. For instance, at Stanford University there is a Center for Teaching and Learning, aiming to constantly improve the teacher's work and the student's learning, while incorporating methods that promote the development of critical reflection in their curricula, as demonstrated in transformative learning theory. Besides, according to Taylor (2009, 4), while the field of higher education is often mentioned among transformative theory scholars, there has not been extensive research on the implementation of relative methods at universities. This gap is identified in literature internationally (Raikou 2013), especially regarding ways to integrate transformative learning in practical terms within this context, what challenges the teacher faces and what purposes can be served.

An Implementation Example

A qualitative research that was conducted in 2008-2012 on female students of the Department of Educational Science and Early Childhood Education, University of Patras, aimed to study a group of 15 students during their studies. The main concept was to monitor this group from the beginning of their second year throughout the last year. During that time period, the students participated in a series of workshops designed and applied based on 'Transformative Learning through Aesthetic Experience' (TLAE), which was developed by Greek professor of Adult Education Alexis Kokkos. The themes of the workshops concerned the learning process.

The method applied derives from the field of adult education and is based on the use of art, in order to reinforce and encourage the development of critical reflection. Through a course of six stages, this method aims to help learners reach a deeper approach, analysis and reflection on the matter at hand (Kokkos 2011, 97-100). The cornerstone of the theory is observation and elaboration of significant works of art that offer triggers for the development of the issue discussed. Thus, it uses the aesthetic experience in order to enhance critical thinking.

The female students participated in these workshops from their second year till the completion of their studies (Raikou 2013). The first year concerned the planning phase and the pilot implementation of the method, while during the next three years the main study took place through the workshops. The subjects that were analyzed concerned the learning process, the role of the educator, the learner-teacher relation and the designing and evaluation of learning units.

After the designing and the pilot use of the learning method during the first year, we progressed to the next step of the systematic implementation of the method through a series of workshops that took place during the second and third year. The aim of the first workshop was to *explore the need for critical reflection on learners' assumptions* regarding the subject of the learning process. The first workshop was launched with an introductory discussion on the main issue, thus learning (goals and methods). During this conversation we attempted to emphasize on the assumptions the students had formed from their experiences till now in typical educational frameworks.

Considering the opinions of the students, the subthemes of the learning procedure were determined, as well as the critical questions that would be processed in the next workshops. The subthemes concerned issues such as guidance, discipline and useful knowledge, as well as the development of attitudes and values.

Consequently, we identified the works of art that would work as triggers for the elaboration of critical questions. The first criterion for the selection of the artworks was the fact that they were significant works of art. Furthermore, they were easy to elaborate, a necessary element as they were addressed to an unexperienced audience, thus the students. But most importantly, they served the educational goals, as they offered triggers for reflection on the issues we were interested in. The works of art that were used were poems, paintings, films and literature.

During the next workshops we attempted to observe the works of art in a systematic way and to correlate the abstracted ideas to the critical questions, for a critical approach of the examined opinions of the students regarding the chosen subthemes. According to the stages of the TLAE method, at the beginning of every workshop we posed the critical question we were about to elaborate. Then the initial points of view of the students were articulated, followed by the presentation and the analysis of the artworks, gradually connecting them to the critical question.

During the elaboration of the artworks all the group members had the opportunity to express themselves freely, regarding the artwork analysis as well as their points of view on the subject. The numerous and different points of view that were heard during the elaboration of the works of art reinforced the critical reflection process and facilitated the judgment of correctness of the participants' assumptions. During the last workshop a re-evaluation of their opinions took place as well as a comparison to those which were expressed prior to the elaboration of the artworks. It was found that the students changed their points of view

regarding learner-teacher relations and the role of the educator through the implementation. The differentiation is shown by the processing of the responses of the students but also by the control exercises compared to other students (Raikou 2013).

Research Findings

Most students participating in the research stated that university lessons took place in a traditional manner (see Table 1). However, most mentioned that there was a limited number of lessons (2-3) that were participatory.

Table 1. Teaching methods

Teaching methods applied at the University	Students
Traditional methods (lecture, slide presentation)	11
Traditional methods with some experiential elements (conversation)	3
Participatory procedures	1

Compared to the workshops, all the students report that the differences were significant and concerned many aspects. They stress their preference to small groups rather than a large auditorium, to personal than impersonal learning, dialogue and the possibility to participate as opposed to lecture.

They also often refer to the benefits they gained from their participation (see Table 2). What most students stress is that their participation in a small group, where the friendly environment gives the members the possibility to express themselves freely. Furthermore, they highlight the improvement of their interpersonal relations, and the fact that they met new people through this experience, they improved their communication skills and were trained at issues of cooperation, respect and empathy. They believe they gained useful experiences for their personal development regarding character and self-esteem. Regarding their professional development, they claim to have gained knowledge and skills necessary in the educational field.

Table 2. Benefits from their participation in the workshops

Benefits from their participation*	Students
Participation in a small group, in a friendly environment with room for free expression, exchange of views	13
Broadening of thought in general and change of perspective, development of critical thinking	10
Improvement of interpersonal relationships and interaction of group members.	7
Personal improvement (regarding issues of character, self-image and self-criticism).	6
More knowledge concerning art and educational techniques	3

*Possibility of choosing more than one

From the research data it becomes obvious that the majority of students believe that they witnessed, through the workshops, the process of critical reflection as an intense experience that affects them at a personal, social and professional level (Table 3).

Table 3. Benefits of critical reflection

Benefits of critical reflection*	Students
For the formation of opinions and the way of thinking	10
For the preparation of future teachers and for the self-improvement of active teachers	6
In practicum and for realizing and understanding the practical dimensions of certain situations	4
At a personal level	3

*Possibility of choosing more than one

The points of influence the students point out concern mainly the formation of personal beliefs and the development of exploratory thinking. They report improvement in their way of thinking, noting details such as clarity of targets, open-mindedness and receptivity of other views, as well as familiarity with the process of self-evaluation. Furthermore, concerning their professional identity, they referred to their professional preparation and the understanding of their role. The students themselves stress that the implementation of the method was the main factor influencing the development of their personal opinions regarding their role and the reinforcement of the understanding of their professional role.

According to their responses, 14 of 15 students report that in the beginning of their studies they had a different opinion regarding the role of the educator and the teacher-learner relation. That opinion changed during their studies. May had a different general opinion concerning the teacher, and especially the kindergarten-

ten teacher whom they did not regard as an educator but as young children's caretaker. However, after time they realized the role of kindergarten teachers as educators and what they offer. Concerning the factors that influenced that change and the forming of their opinions on their role most, 12 of 15 students report that it was their participation in workshops with the implementation of the TLAE method, which in combination with their internship, helped them realize their role to a great extent.

Conclusion

The fields of adult education and higher education have many common points of interest. The promotion of transformative learning in universities is proven to be one of the main objectives for higher education, as it prepares fertile grounds for the growing course of students in education, through the cultivation of critical thinking.

Methods such as 'Transformative Learning through Aesthetic Experience' can be very useful for that matter. The method facilitates critical reflection on assumptions the students have accepted through art. The implementation of the method reinforces reflective processes and makes small, systematic changes in their points that to a following level change mental habits. According to Mezirow (1990, 375), *'becoming reflective of the content, process, and especially the premises of one's prior learning is central to cognition for survival in modern societies. It is the way we control our experiences rather than be controlled by them, and it is an indispensable prerequisite to individual, group and collective transformations, both perspective and social'*.

Enhancing critical thinking and reflective processes regarding established opinions must be one of the key benchmarks of student education. The preparation of new scientists with innovative methods and contemporary practices which will favor the development of thinking human beings, with broad horizons and the ability to adjust to constant changes. In order for this to occur, it is important for the individuals to distance themselves from social norms, to be self-defined and (re)determined in a functional way, aiming to their empowerment. To become objects of themselves.

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